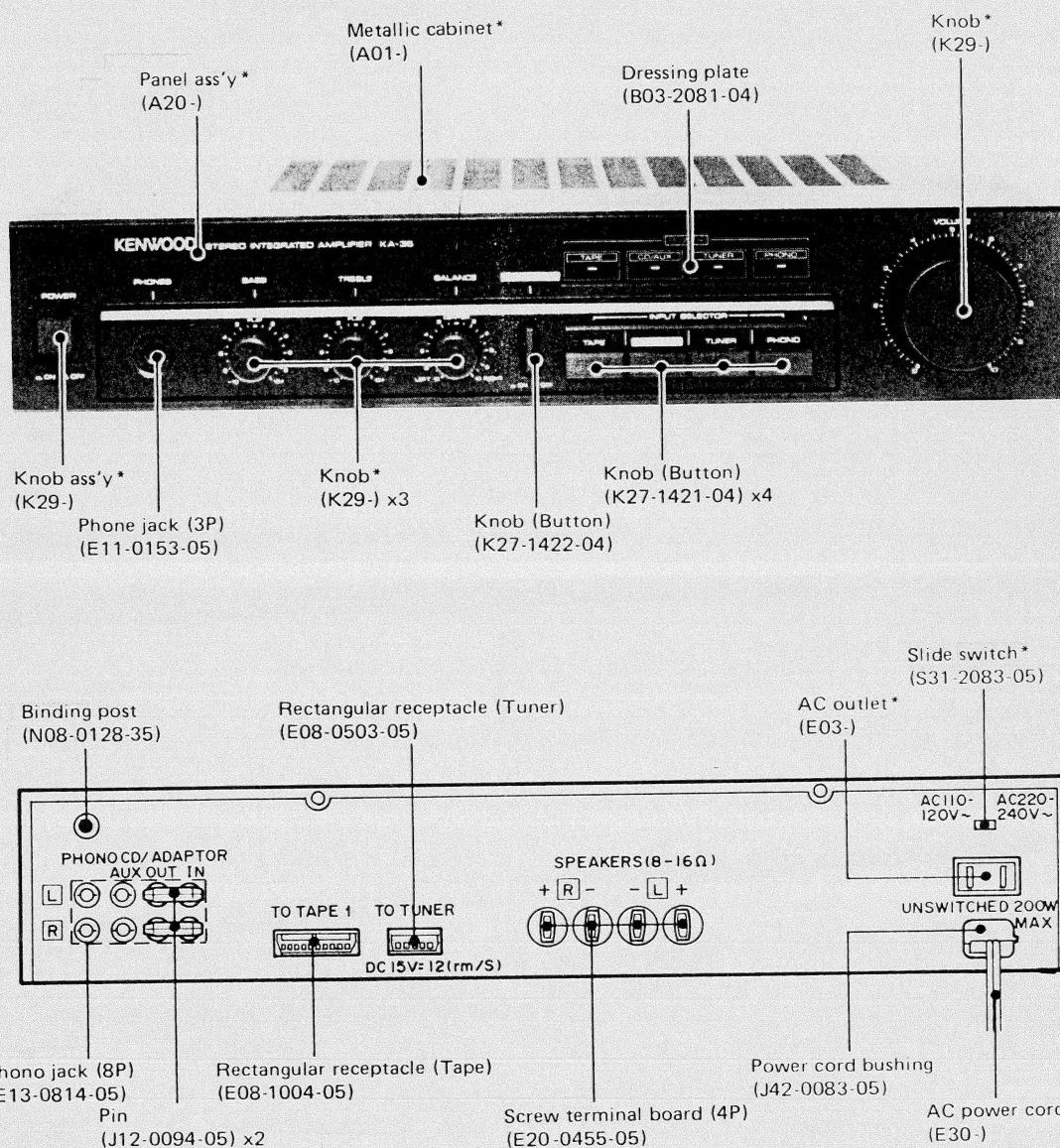


STEREO INTEGRATED AMPLIFIER
KA-35
 SERVICE MANUAL

KENWOOD

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 B51-1927-00(O)100



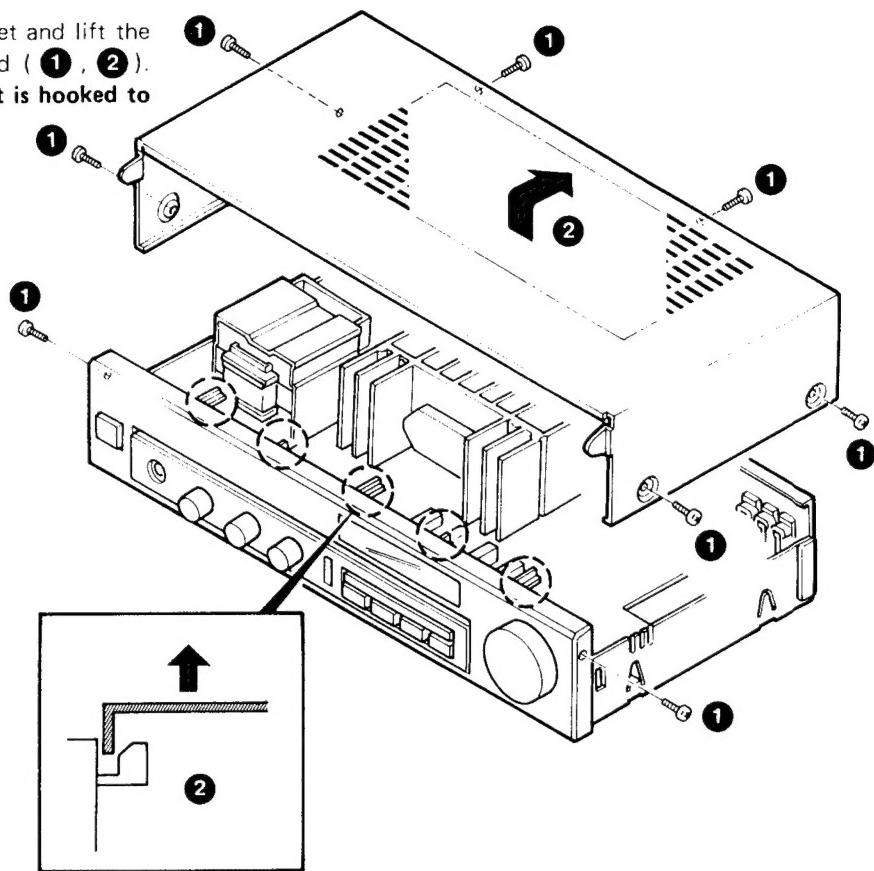
Note : When doing service of KT-35, KT-35L, or KX-35W be sure to have the customer bring the KA-35 or use the DC power supply.

* Refer to parts list on page 6.

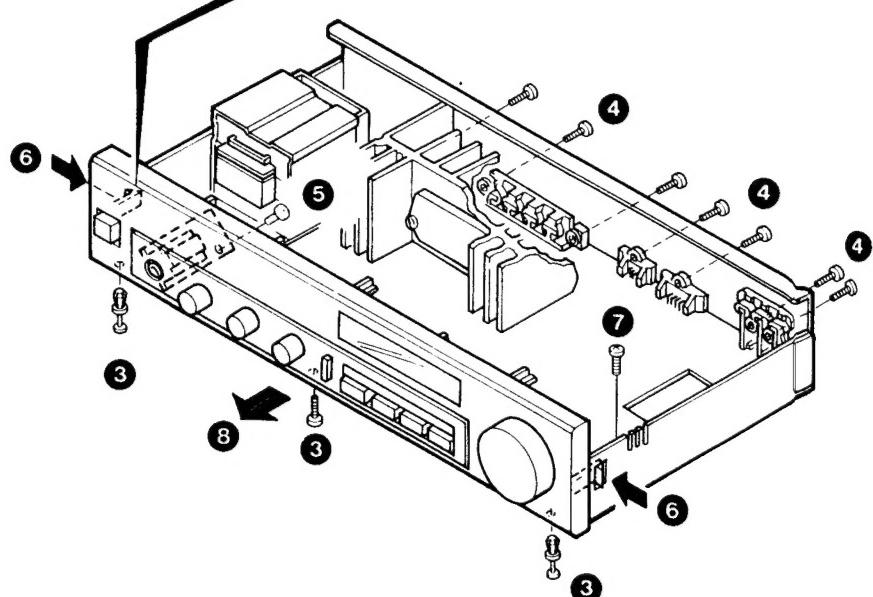
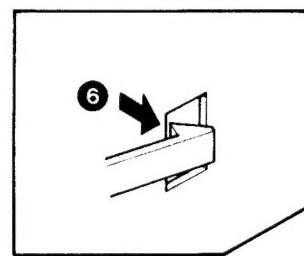
DISASSEMBLY FOR REPAIR

DISASSEMBLY FOR REPAIR

1. Remove 8 screws from the metallic cabinet and lift the metallic cabinet up and slide it rearward (① , ②).
(Note) Be aware that the metallic cabinet is hooked to the projections on the panel.

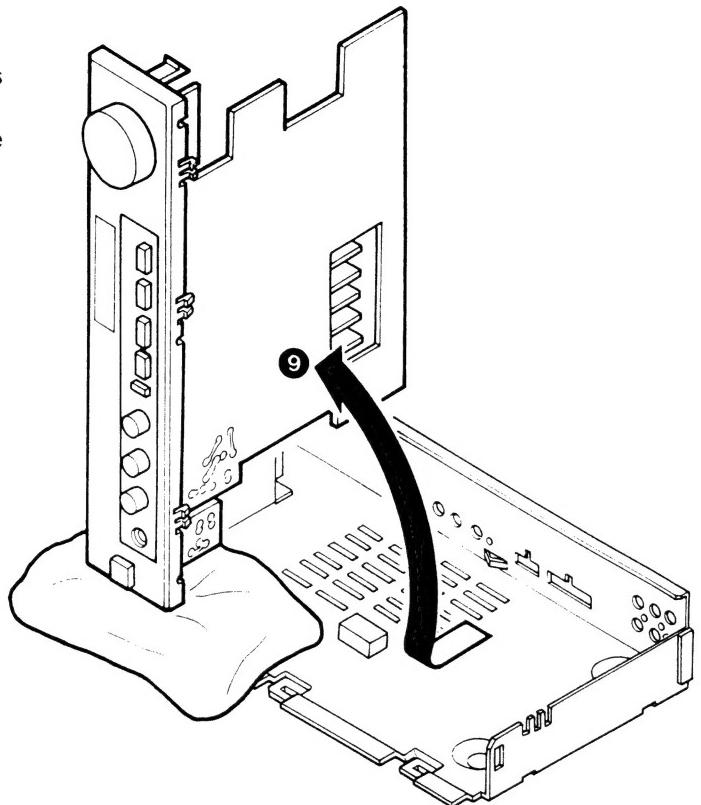


2. Remove 1 screw and two push rivets at the bottom of the panel (③) and 7 screws at the rear panel (④).
3. Remove 1 screw retaining the phone jack pcb (⑤).
4. Push the pawls at both sides of the panel and release from the hole (⑥).
5. Remove 1 screw at the pcb (⑦).
6. The panel with pc boards attached, can be pulled front-ward (⑧).



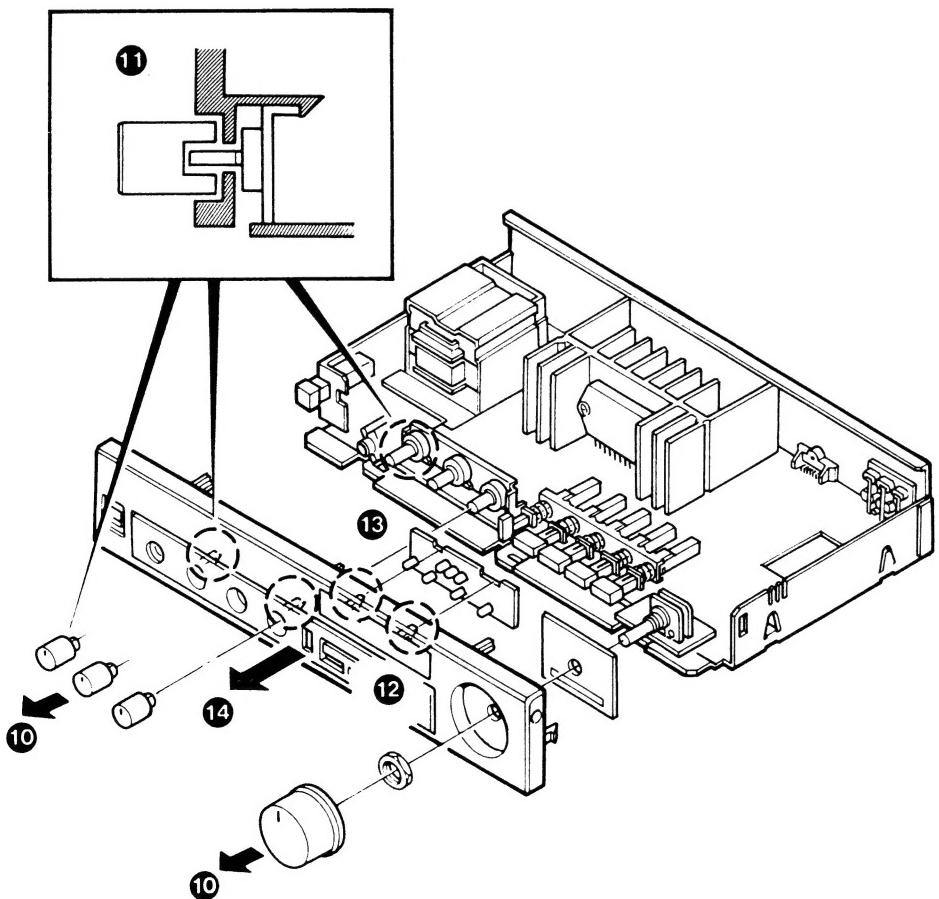
DISASSEMBLY FOR REPAIR

6. Place a cloth, or something equivalent to avoid damages to the side of the panel.
 7. Turn the panel to the upright position and place the pc board on the rear panel as shown (9).



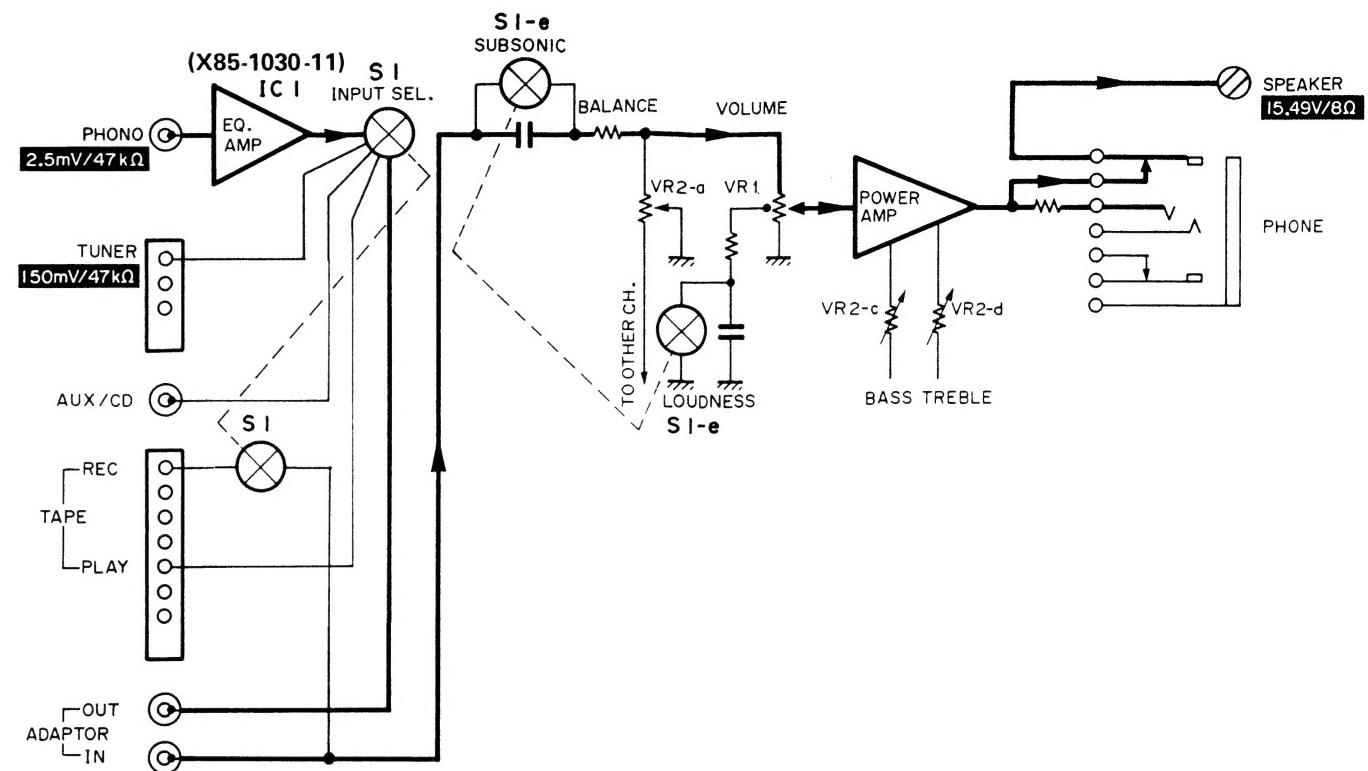
8. Pull off BASS, TREBLE, BALANCE and VOLUME knobs (10).
 9. Release the hook on the rear side of the panel from the potentiometer mounting hardware (11).

10. Remove the hexagonal nut from the VOLUME potentiometer (12) and release the hook from the LED pc board (13).
 11. Pull the panel frontward (14).



BLOCK LEVEL DIAGRAM/CIRCUIT DESCRIPTION

BLOCK LEVEL DIAGRAM



CIRCUIT DESCRIPTION

Description of components

AUDIO (X09-2291-01)

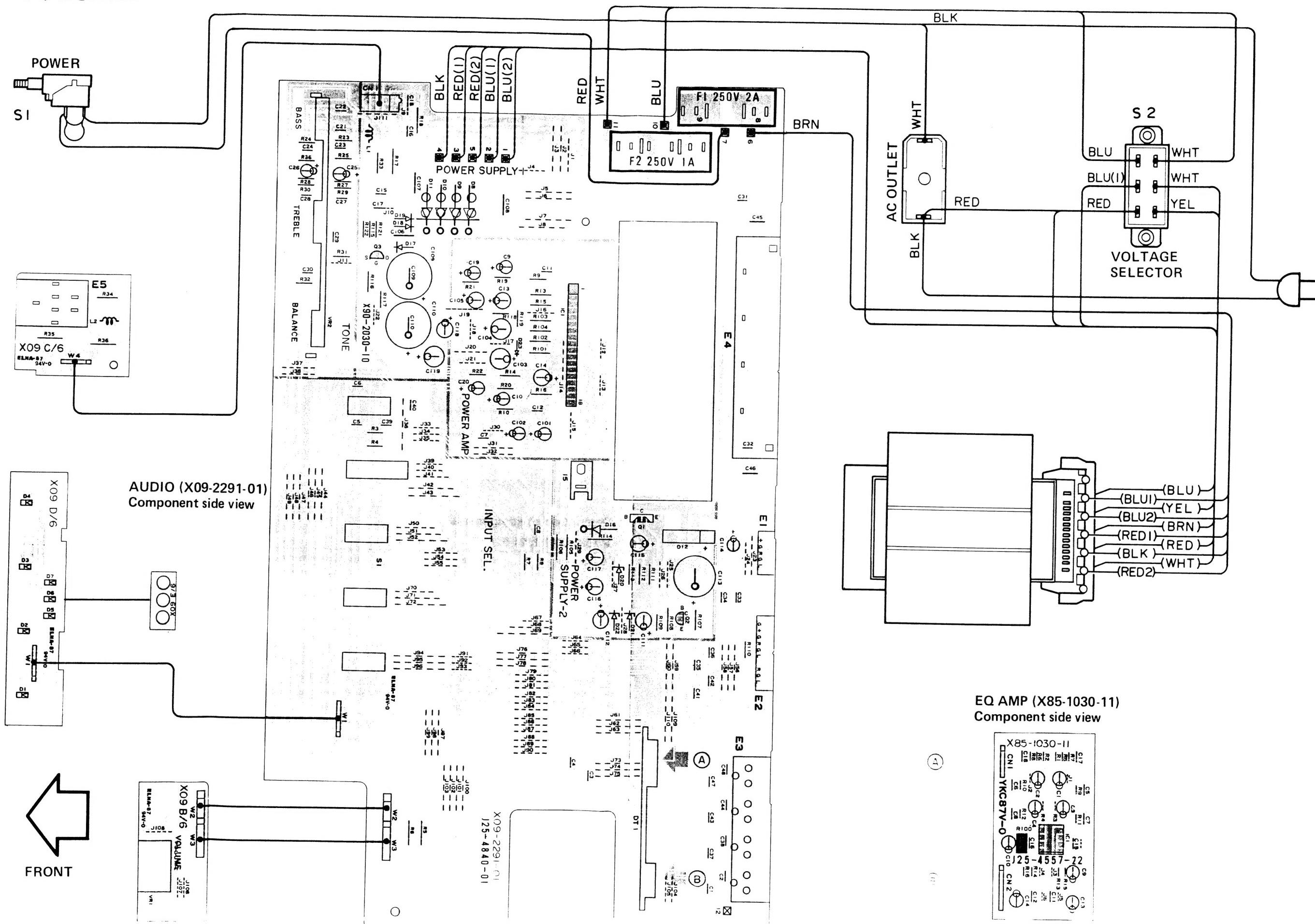
Component	Part No.	Application/function	Operation/condition/compatibility
IC1	STK4141/2*1 or STK4151/2	Power amplifier	
Q1	2SD1266(Q,P)	AVR	Compatible with 2SC2167 or 2SD330. (Required insulation plate and insulating bushing when attaching.)
Q2	2SC945(A),(Q,P)	Discharge EQ power supply when Power OFF	Compatible with 2SC2320(E,F).
Q3	2SK246(Y)	Muting when Power ON/OFF	
D1~D7	B30-0431-05	Various kinds display	
D8~D11	GP20DL	Rectifier	
D12	1B4B41	Rectifier for external power supply	
D16	GP10D-5007L	Rectifier for LEDs	Compatible with DSM1A1 or W06B.
D17~D19	SDM1A1	Muting control when Power ON/OFF	
D20	RD16ES(B2) or HZS16N(B2)	AVR for external power supply	Compatible with RD16E(B2), RD16J(B2), RD1 6JS(B2).
D21,D22	RD15ES(B) or HZS15N(B)	EQ AVR	Compatible with RD15E(B), RD15J(B), RD15JS(B).
D23	1SS131 or 1SS178	Muting control when power ON/OFF	Compatible with 1S2076A.

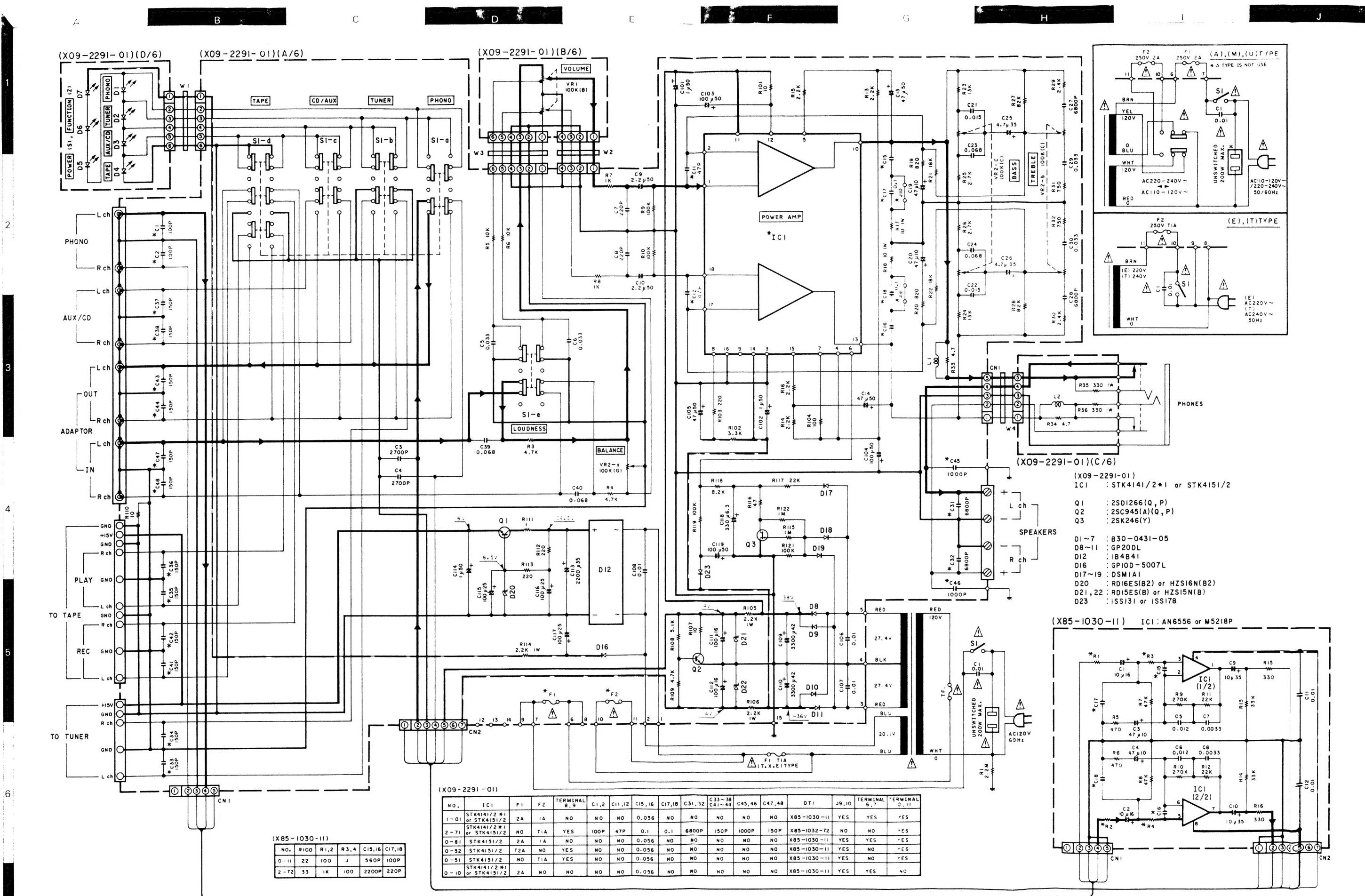
EQ AMP (X85-1030-11)

Component	Part No.	Application/function	Operation/condition/compatibility
IC1	AN6556 or M5218P	EQ Amplifier	For Phono.

KA-35 KA-35

PC BOARD





2SC945

2SD1266

2SK246

AN6556
M5218PSTK4141/2*1
STK4151/2

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). **Δ**Indicates safety critical components. To reduce the risk of electric shock, leakage current measurement measurements shall be carried out (explosive parts are acceptably disconnected from the supply circuit) before the appliance is returned to the customer.

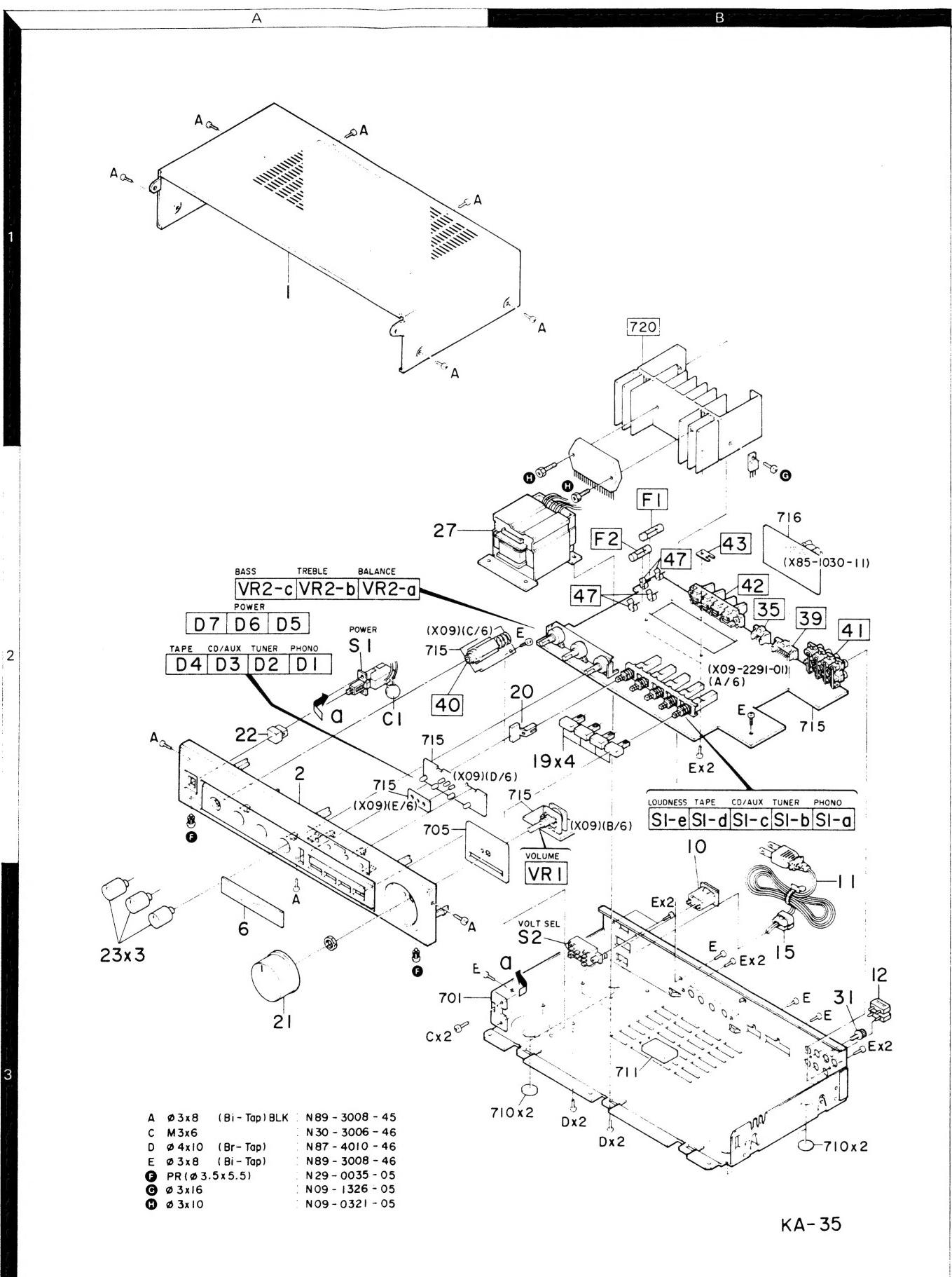
KA-35 (k)

KA-35

KENWOOD

KA-35 KA-35

EXPLODED VIEW



PARTS LIST

* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti- nation 仕 向	Re- marks 備考
KA-35						
1	1A		A01-1392-01	METALLIC CABINET	PUM1	
1	1A		A01-1392-01	METALLIC CABINET	UEX	
1	1A		A01-1392-01	METALLIC CABINET	TE1A1	
1	1A		A01-1394-01	METALLIC CABINET	M2E2A2	
2	2A	*	A20-4886-02	PANEL ASSY	PUM1	
2	2A	*	A20-4886-02	PANEL ASSY	UEX	
2	2A	*	A20-4886-02	PANEL ASSY	E1A1	
2	2A	*	A20-4887-02	PANEL ASSY	M2E2A2	
2	2A	*	A20-4888-02	PANEL ASSY	T	
6	3A		B03-2081-04	DRESSING PLATE		
-			B46-0094-03	WARRANTY CARD	UUE	
-			B46-0095-03	WARRANTY CARD	UUE	
-			B46-0096-13	WARRANTY CARD	X	
-			B46-0121-03	WARRANTY CARD	P	
-			B46-0122-13	WARRANTY CARD	E1E2	
-			B46-0123-03	WARRANTY CARD	T	
-		*	B50-6202-00	INSTRUCTION MANUAL(ENGLISH)	PUM1A1	
-		*	B50-6202-00	INSTRUCTION MANUAL(ENGLISH)	UEXA2	
-		*	B50-6202-00	INSTRUCTION MANUAL(ENGLISH)	E1M2E2	
-		*	B50-6203-00	INSTRUCTION MANUAL(FRENCH)	PM1XA1	
-		*	B50-6203-00	INSTRUCTION MANUAL(FRENCH)	E1M2E2	
-		*	B50-6203-00	INSTRUCTION MANUAL(FRENCH)	A2	
-		*	B50-6204-00	INSTRUCTION MANUAL(SPANISH)	M1M2A1	
-		*	B50-6204-00	INSTRUCTION MANUAL(SPANISH)	A2	
-		*	B50-6205-00	INSTRUCTION MANUAL(ENGLISH)	T	
-		*	B50-6206-00	INSTRUCTION MANUAL(D.G.I.SW)	E1E2	
-		*	B50-6207-00	INSTRUCTION MANUAL(ARABIC)	M1M2	
-		*	B50-6207-00	INSTRUCTION MANUAL(ARABIC)	A1A2	
-		*	B58-0223-04	CAUTION CARD (PRE-SET 120V)	U	
-			B58-0245-33	CAUTION CARD (FTZ)	E1E2	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	UE	
-			B59-0092-00	SERVICE DIRECTORY	UUE	
▲ C1	2A		C91-0023-05	CERAMIC 0.01UF AC250V	UM1	
▲ C1	2A		C91-0023-05	CERAMIC 0.01UF AC250V	UEM2	
▲ C1	2A		C91-0647-05	CERAMIC 0.01UF P	FXTA1	
▲ C1	2A		C91-0647-05	CERAMIC 0.01UF P	E1E2A2	
▲ 10	2B		E03-0036-05	AC OUTLET	UM1	
▲ 10	2B		E03-0036-05	AC OUTLET	UEM2	
▲ 10	2B		E03-0041-05	AC OUTLET	P	
▲ 11	3B		E30-0459-05	AC POWER CORD	E1E2	
▲ 11	3B		E30-0812-05	AC POWER CORD	UM1	
▲ 11	3B		E30-0812-05	AC POWER CORD	UEM2	
▲ 11	3B		E30-0974-05	AC POWER CORD	P	
▲ 11	3B		E30-1329-05	AC POWER CORD	A1A2	
▲ 11	3B		E30-1341-05	AC POWER CORD	X	
▲ 11	3B		E30-1416-05	AC POWER CORD	T	
▲ -			E03-0047-05	AC INLET	A1A2	
▲ F1			F06-1022-05	FUSE (SEMKO) (250V T1A)	XE1E2	
-		*	H01-7182-04	ITEM CARTON CASE	PUM1	
-		*	H01-7182-04	ITEM CARTON CASE	UEX	
-		*	H01-7182-04	ITEM CARTON CASE	E1A1	

E: Scandinavia & Europe H: Audio Club K: USA P: Canada W: Europe

A: Saudi Arabia T: England U: PX(Far East, Hawaii)

UE: AAFFES(Europe) X: Australia M: Other Areas

M2,E2,A2 Silver Panel

▲ indicates safety critical components

KA-35 KA-35

PARTS LIST

* New Parts

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
-		*	H01-7183-04	ITEM CARTON CASE	M2E2A2	
-		*	H01-7184-04	ITEM CARTON CASE	T	
-		*	H10-3315-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-3316-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H12-1136-04	CARTON BOARD		
-			H25-0223-04	PROTECTION BAG (750X350)		
-			H25-0232-04	PROTECTION BAG (235X350)		
12			J12-0094-05	PIN		
15			J42-0083-05	POWER CORD BUSHING	XE1E2	
-			J13-0053-05	FUSE HOLDER		
-			J61-0307-05	WIRE BAND		
19	2B		K27-1421-04	KNOB (BUTTON)	SELECTOR	
20	2B		K27-1422-04	KNOB (BUTTON)	LOUDNESS	
21	3A	*	K29-2399-04	KNOB	VOLUME	PUM1
21	3A	*	K29-2399-04	KNOB	VOLUME	UEX
21	3A	*	K29-2399-04	KNOB	VOLUME	TE1A1
21	3A	*	K29-2400-04	KNOB	VOLUME	M2E2A2
22	2A		K29-1446-04	KNOB ASSY	POWER	M2E2A2
22	2A		K29-2001-04	KNOB ASSY	POWER	PUM1
22	2A		K29-2001-04	KNOB ASSY	POWER	UEX
22	2A		K29-2001-04	KNOB ASSY	POWER	TE1A1
23	3A		K29-2026-04	KNOB	TONE, BALANCE	PUM1
23	3A		K29-2026-04	KNOB	TONE, BALANCE	UEX
23	3A		K29-2026-04	KNOB	TONE, BALANCE	TE1A1
23	3A		K29-2081-04	KNOB	TONE, BALANCE	M2E2A2
△ 27	2A		L01-6601-05	POWER TRANSFORMER	P	
△ 27	2A		L01-6605-05	POWER TRANSFORMER	UM1A1	
△ 27	2A		L01-6605-05	POWER TRANSFORMER	UEM2A2	
△ 27	2A		L01-6607-05	POWER TRANSFORMER	E1E2	
△ 27	2A		L01-6608-05	POWER TRANSFORMER	XT	
31	3B		N08-0128-35	BINDING POST (GND)	XTE1	
F	2A, 3A		N29-0035-05	PUSH RIVET (3.5X5.5)	E2	
F	2A, 3A		N29-0035-05	PUSH RIVET (3.5X5.5)		
F	2A, 3A		N29-0088-05	PUSH RIVET (3X6.3)		
R1			R92-0173-05	RC 2.2M M 1/2W	P	
△ S1	2A		S40-1066-05	PUSH SWITCH (POWER)		
△ S2	3B		S31-2083-05	SLIDE SWITCH (VOLTAGE SELECT)	UM1A1	
△ S2	3B		S31-2083-05	SLIDE SWITCH (VOLTAGE SELECT)	UEM2A2	

AUDIO (X09-2291-01)

D1	-7	2A	B30-0431-05	LED(LN21CPH)		
C1	-2		CC45FSL1H101J	CERAMIC	100PF J	E1E2
C3	-4		CF92FV1H272J	MF	2700PF J	
C5	-6		CF92FV1H333J	MF	0.033UF J	
C7	-8		CC45FSL1H221J	CERAMIC	220PF J	
C9	-10		CE04KW1H2R2M	ELECTRO	2.2UF 50WV	
C11	-12		CC45FSL1H470J	CERAMIC	47PF J	E1E2
C13	-14		CE04KW1H470M	ELECTRO	47UF 50WV	
C15	-18		CF92FV1H104J	MF	0.10UF J	E1E2
C15	-16		CF92FV1HS63J	MF	0.056UF J	PUM1
C15	-16		CF92FV1HS63J	MF	0.056UF J	UEX
C15	-16		CF92FV1HS63J	MF	0.056UF J	TM2
C19	-20		CE04KW1A470M	ELECTRO	47UF 10WV	

M2,E2,A2 Silver Panel

PARTS LIST

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
C21	-22		CF92FV1H153J	MF	0.015UF J	
C23	-24		CF92FV1H683J	MF	0.068UF J	
C25	-26		CEO4KW1V4R7M	ELECTRO	4.7UF 35WV	
C27	-28		CF92FV1H682J	MF	6800PF J	
C29	-30		CF92FV1H333J	MF	0.033UF J	
C31	-32		CK45FB1H682K	CERAMIC	6800PF K	E1E2
C33	-38		CC45FSL1H151J	CERAMIC	150PF J	E1E2
C39	-40		CF92FV1H683J	MF	0.068UF J	
C41	-44		CC45FSL1H151J	CERAMIC	150PF J	E1E2
C45	-46		CK45B1H102K	CERAMIC	1000PF K	E1E2
C47	-48		CC45FSL1H151J	CERAMIC	150PF J	E1E2
C101	-102		CEO4KW1H101M	ELECTRO	1.0UF 50WV	
C103	-104		CEO4KW1H101M	ELECTRO	100UF 50WV	
C105			CEO4KW1H470M	ELECTRO	4.7UF 50WV	
C106	-108		CK45FE2H103P	CERAMIC	0.010UF P	
C109	-110		C90-1232-05	ELECTRO	3300UF 42WV	
C111	-112		CEO4KW1C101M	ELECTRO	100UF 16WV	
C113			CEO4KW1V222M	ELECTRO	2200UF 35WV	
C114			CEO4KW1H101M	ELECTRO	1.0UF 50WV	
C115	-117		CEO4KW1E101M	ELECTRO	100UF 25WV	
C118			CE04KW0J331M	ELECTRO	330UF 6.3WV	
C119			CE04KW1H101M	ELECTRO	100UF 50WV	
35	2B		E08-0503-05		RECTANGULAR RECEPTACLE(TUNER)	
39	2B		E08-1004-05		RECTANGULAR RECEPTACLE(TAPE)	
40	2A		E11-0153-05		PHONE JACK (3P) PHONES	
41	2B		E13-0814-05		PHONE JACK (8P) PHONES, TAPE	
42	2B		E20-0455-05		SCREW TERMINAL BOARD(4P)	
43	2B		E23-0125-05		TERMINAL (GND)	
△ F1	2B		F05-2023-05	FUSE	(250V 2A)	UM1A1
△ F1	2B		F05-2023-05	FUSE	(250V 2A)	UEM2A2
△ F1	2B		F06-2027-05	FUSE (UL)	(250V 2A)	P
△ F2	2B		F05-1023-05	FUSE	(250V 1A)	UM1A1
△ F2	2B		F05-1023-05	FUSE	(250V 1A)	UEM2A2
△ F2	2B		F05-1024-05	FUSE (UL)	(250V 1A)	P
△ F2	2B		F06-1022-05	FUSE (SEMKO)	(250V T1A)	XTE1
△ F2	2B		F06-1022-05	FUSE (SEMKO)	(250V T1A)	E2
47	2B		J13-0041-05	FUSE CLIP		UM1A1
47	2B		J13-0041-05	FUSE CLIP		UEM2A2
47	2B		J13-0054-05	FUSE CLIP		XTE1
47	2B		J13-0054-05	FUSE CLIP		E2
L1	-2		L39-0085-05		PHASE-COMPENSATION COIL	
G			N09-1236-05		TAPPING SCREW (3X16)	
H			N09-0321-05		TAPPING SCREW (3X10)	
R13	-16		RD14AB2E222J	FL-PR00F RD	2.2K J 1/4W	
R17	-18		RS14DB3A100J	FL-PR00F RS	10 J 1W	
R33	-34		RD14AB2E4R7J	FL-PR00F RD	4.7 J 1/4W	
R35	-36		RS14DB3A331J	FL-PR00F RS	330 J 1W	
R101			RD14AB2E100J	FL-PR00F RD	10 J 1/4W	
R102			RD14AB2E332J	FL-PR00F RD	3.3K J 1/4W	
R103			RD14AB2E221J	FL-PR00F RD	220 J 1/4W	
R104						

KA-35 KA-35

PARTS LIST

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
R107			RD14AB2E100J	FL-PROOF RD 10	J 1/4W	
R111			RD14AB2E1R0J	FL-PROOF RD 1.0	J 1/4W	
R112,113			RD14AB2E221J	FL-PROOF RD 220	J 1/4W	
R114			RS14DB3A222J	FL-PROOF RS 2.2K	J 1W	
R116			RD14AB2E470J	FL-PROOF RD 47	J 1/4W	
VR1	3B		RD6-5067-05	POTENTIOMETER(100KX2)	VOLUME	
VR2	2A		R29-9011-05	POTENTIOMETER (TONE,BALANCE)		
S1	2B	*	S42-5046-05	MULTIPLE PUSH SWITCH (SELECT)		
D8 -11			GP20DL	DIODE		
D12			1B4B41	DIODE		
D16			GP10D-5007L	DIODE		
D17 -19			DSM1A1	DIODE		
D20			HZ916N(B2)	ZENER DIODE		
D20		*	RD16ES(B2)	ZENER DIODE		
D21 ,22		*	HZ915N(B)	ZENER DIODE		
D21 ,22		*	RD15EG(B)	ZENER DIODE		
D23			1SS131	DIODE		
D23			1SS178	DIODE		
IC1			STK4141/2*1	IC(AF POWER AMP/ 25W X2)		
IC1			STK4151/2	IC(AF POWER AMP/ 30W X2)		
Q1			2SD1266(Q,P)	TRANSISTOR		
Q2			2SC945(A)(Q,P)	TRANSISTOR		
Q3			2SK246(Y)	FET		

EQ AMP (X85-1030-11)

C1 ,2		CE04FW1C100M	ELECTRO	10UF	16WV	
C3 ,4		CE04FW1A470M	ELECTRO	47UF	10WV	
C5		CF92FV1H123J	MF	0.012UF	J	
C6		CF92FV1H123J	MF	0.012UF	J	
C7		CF92FV1H332J	MF	3300PF	J	
C8		CF92FV1H332J	MF	3300PF	J	
C9 ,10		CE04KW1V100M	ELECTRO	10UF	35WV	
C11 ,12		CK45FF1H103Z	CERAMIC	0.010UF	Z	
C15 ,16		CK45FB1H222K	CERAMIC	2200PF	K	E1E2
C15 ,16		CK45FB1H561K	CERAMIC	560PF	K	PUM1A1
C15 ,16		CK45FB1H561K	CERAMIC	560PF	K	UEXA2
C15 ,16		CC45FSL1H101J	CERAMIC	100PF	J	TM2
C17 ,18		CC45FSL1H101J	CERAMIC	100PF	J	PUM1A1
C17 ,18		CC45FSL1H101J	CERAMIC	100PF	J	UEXA2
C17 ,18		CC45FSL1H221J	CERAMIC	220PF	J	TM2
IC1		AN6556	IC(8P AMP X2)			
IC1		M5218P	IC(8P AMP X2)			

E: Scandinavia & Europe H: Audio Club K: USA P: Canada W: Europe

A: Saudi Arabia T: England U: PX(Far East, Hawaii)

UE: AAFES(Europe) X: Australia M: Other Areas

M2,E2,A2 : Silver Panel

▲ indicates safety critical components

SPECIFICATIONS

Audio Section

Power Output

30 watts* per channel minimum RMS, both channels driven, at 8 ohms from 40 Hz to 20,000 Hz with no more than 0.9% total harmonic distortion.

Maximum Continuous (IEC) 30 W + 30 W 60 Hz to 12,500 Hz at 0.7% T.H.D. 8 ohms (U.K. and Europe model)

Both Channels Driven 30 W + 30 W 8 ohms at 1,000 Hz (Except USA, U.K. and Europe)

Music Power 70 W + 70 W 8 ohms (Except USA, U.K., Canada and Europe)

Total Harmonic Distortion

AUX input to Speaker output

(40 Hz to 20,000 Hz) 0.9% at rated power into 8 ohms
(40 Hz to 20,000 Hz) 0.2% at rated power into 8 ohms
(1,000 Hz) 0.07% at 1/2 rated power into 8 ohms

Phono input to Speaker

Output (1,000 Hz) 0.07% at rated power with Volume -20 dB

Intermodulation Distortion

(60 Hz : 7,000 Hz = 4 : 1) 0.2% at rated power into 8 ohms

Damping Factor 40 (1,000 Hz into 8 ohms)

Power Bandwidth 10 Hz to 70,000 Hz at 1% T.H.D. 8 ohms

Frequency Response 20 Hz to 100,000 Hz +1 dB, -3 dB

Signal-to-Noise Ratio (IHF, A)

Phono MM 73 dB for 2.5 mV input
79 dB for 5.0 mV input

Tuner, Tape, AUX 97 dB

Signal-to-Noise Ratio (DIN)

Phono MM 55 dB/50 mW (U.K. and Europe models)

Tuner, Tape, AUX 55 dB/50 mW (U.K. and Europe models)

Phono Maximum Input Level 140 mV (RMS), T.H.D. 0.9% at 1,000 Hz

Note :

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Canada (P) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

Output Level/Impedance

Tape REC (Pin) 150 mV/330 ohms

Adaptor Out 150 mV/330 ohms

Phono Frequency Response RIAA standard curve ±0.5 dB (30 Hz to 20,000 Hz)

Tone Control

Bass ±9 dB at 100 Hz

Treble ±9 dB at 10,000 Hz

Loudness Control +9 dB at 100 Hz (at -30 dB Volume Level)

Channel Separation (DIN)

Phono 60 dB 2,200 ohms at 1,000 Hz
AUX 55 dB 47,000 ohms +250 pF at 1,000 Hz

General

power Requirements 120 V, 60 Hz (USA and Canada models), 220 V, 50 Hz (Europe model), 240 V, 50 Hz (U.K. and Australia models) or 110-120 V/220-240 V 50/60 Hz, switchable (Other countries)

Power Consumption 1.5 A (USA and Canada models)
100 W (Other countries)

AC Outlet Unswitched 1 (200 W) (Except U.K., Australia and Europe)

Dimensions W 420 mm (16-1/2")
H 89 mm (3-1/2")
D 242 mm (9-1/2")

Weight

Net 4.0 kg (8.8 lb)

Gross 4.6 kg (10.3 lb)

* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in USA.

Note : We follow a policy of continuous advancements in developments. For this reason specifications may be changed without notice.

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